Subject: Re: Hex constants interpreted differently in IDL/v5.2
Posted by davidf on Mon, 24 May 1999 07:00:00 GMT
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William Thompson (thompson@orpheus.nascom.nasa.gov) writes:

> Apparently, IDL/v5.2 interprets some hexadecimal constants differently than
> previous versions. For example, the statement
>
> IDL> help,'aa7f'x
>
> under IDL/v5.1 produces the result
>
> <Expression> LONG = 43647
>
> while under IDL/v5.2, the following is returned
>
> <Expression> INT = -21889

Yep. I think I reported this already. (Or meant to,
if I didn't.)

I first noticed it with this kind of syntax:

```
Plot, data, Color='00ffff'x
```

This used to draw a yellow plot, but started drawing
white plots in IDL 5.2. Of course, the previous behavior
was decidedly a bug (that I had gotten used to, darn it),
but if you want a 24-bit number, you really do need to
make it a long:

```
Plot, data, color='00ffff'xL
```

I presume the bug was found and fixed when the programmers
were implementing the unsigned integer data type. :-)

Cheers,

David
--
David Fanning, Ph.D.
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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Hex constants interpreted differently in IDL/v5.2
Posted by thompson on Tue, 25 May 1999 07:00:00 GMT
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thompson@orpheus.nascom.nasa.gov (William Thompson) writes:

> A colleague of mine (Craig DeForrest) pointed this out to me, and I thought it
> important enough to distribute more widely. Has anybody else run into this
> one?

> Apparently, IDL/v5.2 interprets some hexadecimal constants differently than
> previous versions. For example, the statement

> IDL> help,'aa7f'x

> under IDL/v5.1 produces the result

> <Expression> LONG = 43647

> while under IDL/v5.2, the following is returned

> <Expression> INT = -21889

Update -- I just heard that RSI considers this a bug, because v5.2 acts
differently in this regard than all earlier versions of IDL. The next version
of IDL should go back to the old behavior.

Bill Thompson

Subject: Re: Hex constants interpreted differently in IDL/v5.2
Posted by thompson on Tue, 25 May 1999 07:00:00 GMT
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In an earlier message, I had written

> To be affected, the hexadecimal constant needs to be exactly four bytes long,
^^^^^^^^^^

Oops, I meant to say "four nibbles" (i.e. two bytes). :^)

Bill Thompson

Subject: Re: Hex constants interpreted differently in IDL/v5.2
Posted by Martin Schultz on Tue, 25 May 1999 07:00:00 GMT

David Fanning wrote:
>
> William Thompson (thompson@orpheus.nascom.nasa.gov) writes:
>
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> Yep. I think I reported this already. (Or meant to,
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> white plots in IDL 5.2. Of course, the previous behavior
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> but if you want a 24-bit number, you really do need to
> make it a long:
>
> Plot, data, color='00ffff'xL
>
> I presume the bug was found and fixed when the programmers
> were implementing the unsigned integer data type. :-)
>
> Cheers,
>
> David

Why should this be a bug? With '00ffff'x you are specifying 3 bytes,
hence you need at least a long variable. I would think it's OK if this
is interpreted as such. For the cases that William mentions, it i
sarguable whether the correct behaviour should be to produce an unsigned
int instead of a 'normal' int. At least in my experience, hex numbers
are usually meant to be positive. And you could still force it as
fix('f000'x).

Regards,
Martin

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